LISTING OF CLAIMS

The listing of claims set forth below will replace all prior versions and listings of claims in the application.

1. (Original) A population of hybridoma cells wherein greater than 15 % of the cells in the population express monoclonal antibody that is bound to the cell surface.

2. (Original) A population of hybridoma cells wherein greater than 25 % of the cells in the population express monoclonal antibody that is bound to the cell surface.

3. (Original) A population of hybridoma cells wherein greater than 50% of the cells in the population express monoclonal antibody that is bound to the cell surface.

4. (Original) A population of hybridoma cells wherein greater than 75% of the cells in the population express monoclonal antibody that is bound to the cell surface.

5. (Original) A hybridoma cell, wherein greater than twenty monoclonal antibody molecules are expressed and bound to the cell surface.

6. (Original) A hybridoma cell, wherein greater than fifty monoclonal antibody molecules are expressed and bound to the cell surface.

7. (Original) A hybridoma cell, wherein greater than one hundred monoclonal antibody molecules are expressed and bound to the cell surface.

8. (Original) A hybridoma cell, wherein greater than two hundred and fifty monoclonal antibody molecules are expressed and bound to the cell surface.

9. (Original) A hybridoma cell, wherein greater than five hundred monoclonal antibody molecules are expressed and bound to the cell surface.

10. (Original) A population of hybridoma cells wherein greater than 15 % of the cells in the population express monoclonal antibody that is bound to the cell surface and wherein greater than twenty monoclonal antibody molecules are expressed and bound to the cell surface of the cells in the population that express monoclonal antibody.

11. (Original) A population of hybridoma cells wherein greater than 15 % of the cells in the population express monoclonal antibody that is bound to the cell surface and wherein greater than fifty monoclonal antibody molecules are expressed and bound to the cell surface of the cells in the population that express monoclonal antibody.

12. (Original) A population of hybridoma cells wherein greater than 25 % of the cells in the population express monoclonal antibody that is bound to the cell surface and wherein greater than twenty monoclonal antibody molecules are expressed and bound to the cell surface of the cells in the population that express monoclonal antibody.

13. (Original) A population of hybridoma cells wherein greater than 25 % of the cells in the population express monoclonal antibody that is bound to the cell surface and wherein greater than fifty monoclonal antibody molecules are expressed and bound to the cell surface of the cells in the population that express monoclonal antibody.

14. (Original) A hybridoma cell, wherein from about 0.01 % to about 10% of the total amount of monoclonal antibody produced by the hybridoma cell is expressed and bound to the cell surface.

15. (Original) A population of hybridoma cells wherein greater than 15% of the hybridoma cells in the population express from about 0.01% to about 10% of the total amount of monoclonal antibody produced by the hybridoma cells on the cell surface.

16. (Original) A population of hybridoma cells wherein greater than 15% of the hybridoma cells in the population express from about 0.01% to about 10% of the total amount of monoclonal antibody produced by the hybridoma cells on the cell surface, and wherein greater than twenty monoclonal antibodies are expressed and bound to the cell surface.

17. (Original) A hybridoma cell comprising a vector, wherein the vector comprises a nucleic acid encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ.

18. Canceled

19. (Original) The hybridoma cell of claim 17, comprising at least one chimeric surface-expressed antibody receptor selected from the group consisting of Igα and Igβ.

20. (Original) The hybridoma cell of claim 17, wherein the hybridoma cell comprises Igα.

21. (Original) The hybridoma cell of claim 17, wherein the hybridoma cell comprises Igβ.

22. (Original) The hybridoma cell of claim 17, wherein the hybridoma cell comprises Igα and Igβ.

23. Canceled

24. Canceled

25. Canceled

26. Canceled

27. (Original) The hybridoma cell of claim 17, wherein the vector comprises a nucleic acid encoding Igα.

28. (Original) The hybridoma cell of claim 17, wherein the vector comprises a nucleic acid encoding Igβ.

29. (Original) The hybridoma cell of claim 17, wherein the vector comprises a nucleic acid encoding Igα and Igβ.

30. (Original) The hybridoma cell of claim 17, wherein the nucleic acid encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ is functionally linked to an expression sequence.

31. (Original) The hybridoma cell of claim 30, wherein the expression sequence is an inducible expression sequence.

32. (Original) The hybridoma cell of claim 17, wherein the vector is integrated into the genome of the cell.

33. (Original) The hybridoma cell of claim 17, wherein the vector is not integrated into the genome of the cell.

34. (Original) A hybridoma cell comprising a vector, wherein the vector comprises a nucleic acid encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ, wherein the nucleic acid is linked to an inducible functional expression sequence.

35. (Original) A method for making a hybridoma cell comprising at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ comprising fusing a myeloma cell comprising a vector, wherein the vector comprises a nucleic acid encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ, with a B cell to produce a hybridoma cell comprising at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ.

36. (Original) The method of claim 34, wherein the vector integrates into the genome of the hybridoma cell.

37. (Original) The method of claim 34, wherein the vector does not integrate into the genome of the hybridoma cell.

38. (Original) The method of claim 34, wherein the nucleic acid encoding the surface-expressed antibody receptor is functionally linked to an inducible expression sequence.

39. (Original) The method of claim 34, wherein the myeloma cell comprises at least one nucleic acid functionally encoding at least one mutated surface-expressed antibody receptor selected from the group consisting of Igα and Igβ, wherein the nucleic acid encoding the surface-expressed antibody receptor is functionally linked to an inducible expression sequence.

40. (Original) The method of claim 39, wherein the myeloma cell comprises at least one nucleic acid functionally encoding a mutated Igα receptor comprising one or more mutations selected from the group consisting of: Y176F, Y182F, Y193F, Y204F.

41. (Original) The method of claim 39, wherein the myeloma cell comprises at least one nucleic acid functionally encoding a mutated Igβ receptor comprising one or more mutations selected from the group consisting of: Y190F and Y206F.

42. (Original) A hybridoma cell produced by the method of claim 35.

43. (Original) A B cell comprising a vector, wherein the vector comprises a nucleic acid encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ.

44. (Original) The B cell of claim 43, comprising at least one mutated surface-expressed antibody receptor selected from the group consisting of Igα and Igβ.

45. (Original) The B cell of claim 43, comprising at least one chimeric surface-expressed antibody receptor selected from the group consisting of Igα and Igβ.

46. (Original) The B cell of claim 43, wherein the vector comprises a nucleic acid encoding Igα.

47. (Original) The B cell of claim 43, wherein the vector comprises a nucleic acid encoding Igβ.

48. (Original) The B cell of claim 43, wherein the vector comprises a nucleic acid encoding Igα and Igβ.

49. (Original) The B cell of claim 43, wherein the nucleic acid encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ is functionally linked to an expression sequence.

50. (Original) The B cell of claim 43, wherein the expression sequence is inducible.

51. (Original) The B cell of claim 44, wherein the mutated Igα receptor comprises one or more mutations selected from the group consisting of: Y176F, Y182F, Y193F, Y204F.

52. (Original) The B cell of claim 44, wherein the mutated Igα receptor comprises a deletion of amino acid residues 176 -220.

53. (Original) The B cell of claim 44, wherein the mutated Igβ receptor comprises one or more mutations selected from the group consisting of: Y190F and Y206F.

54. (Original) The B cell of claim 43, wherein the vector integrates into the genome of the B cell.

55. (Original) A B cell comprising a vector, wherein the vector comprises a nucleic acid encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ, wherein the vector comprises a nucleic acid encoding Igα and Igβ and wherein the vector is integrated into the genome of the B cell.

56. (Original) A method of making the B cell of claim 43, comprising transfecting a B cell with a vector comprising at least one nucleic acid functionally encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ, wherein the nucleic acid encoding the surface-expressed antibody receptor is functionally linked to an expression sequence.

57. (Original) The method of claim 56, wherein the expression sequence is an inducible expression sequence.

58. (Original) The method of claim 56, wherein the vector integrates into the genome of the B cell.

59. (Original) A B cell produced by the method of claim 56.

60. (Original) A myeloma cell comprising at least one nucleic acid functionally encoding at at least one surface-expressed antibody receptor selected from the group consisting of

Igα and Igβ, wherein the nucleic acid encoding the surface-expressed antibody receptor is functionally linked to an inducible expression sequence.

61. (Original) A myeloma cell comprising at least one nucleic acid functionally encoding at least one mutated surface-expressed antibody receptor selected from the group consisting of Igα and Igβ, wherein the nucleic acid encoding the surface-expressed antibody receptor is functionally linked to an inducible expression sequence.

62. (Original) The myeloma cell of claim 61, wherein the mutated Igα receptor is a mutated Igα receptor comprising one or more mutations selected from the group consisting of: Y176F, Y182F, Y193F, Y204F.

63. (Original) The myeloma cell of claim 61, wherein the mutated Igβ receptor is a mutated Igβ receptor comprising one or more mutations selected from the group consisting of: Y190F and Y206F.

64. (Original) The myeloma cell of claim 61, wherein the mutated Igα receptor is an Igα comprising a deletion of amino acid residues 176-220.

65. (Original) The myeloma cell of claim 60, wherein the vector comprising a nucleic acid encoding Igα.

66. (Original) The myeloma cell of claim 60, wherein the vector comprising a nucleic acid encoding Igβ.

67. (Original) The myeloma cell of claim 60, wherein the vector comprising a nucleic acid encoding Igα and Igβ.

68. (Original) A method of making the myeloma of claim 60, comprising transfecting a myeloma cell with at least one nucleic acid functionally encoding at least one surface-

expressed antibody receptor selected from the group consisting of Igα and Igβ, wherein the nucleic acid encoding the surface-expressed antibody receptor is functionally linked to an inducible expression sequence.

69. (Original) A method of making the myeloma of claim 61, comprising transfecting a myeloma cell with at least one nucleic acid functionally encoding at least one mutated surface-expressed antibody receptor selected from the group consisting of Igα and Igβ, wherein the nucleic acid encoding the surface-expressed antibody receptor is functionally linked to an inducible expression sequence.

70. (Original) A method of making a monoclonal antibody of interest comprising:

a) contacting a population of hybridoma cells wherein greater than 15 % of the cells in the population express monoclonal antibody that is bound to the cell surface with an antigen linked to a detectable label, wherein the antigen binds to the monoclonal antibody to yield a detectably labeled hybridoma cell;
b) isolating the detectably labeled hybridoma cell, thus identifying a hybridoma cell that produces the monoclonal antibody of interest; and
c) making the monoclonal antibody of interest from the hybridoma cell.

71. (Original) A method of making a monoclonal antibody of interest comprising:

a) contacting a population of hybridoma cells wherein greater than 15 % of the cells in the population express monoclonal antibody that is bound to the cell surface with an antigen, wherein the antigen binds to the monoclonal antibody ;
b) adding a detectable label to the antigen to yield a detectably labeled hybridoma cell;
c) isolating the detectably labeled hybridoma cell, thus identifying a hybridoma cell that produces the monoclonal antibody of interest; and
d) making the monoclonal antibody of interest from the hybridoma cell.

72. (Original) The method of claim 70, wherein the detectable label is a fluorescent label, and wherein the hybridoma cell is isolated via fluorescence activated cell sorting.

73. (Original) The method of claim 71, wherein the detectable label is a fluorescent label, and wherein the hybridoma cell is isolated via fluorescence activated cell sorting

74. (Original) A monoclonal antibody produced by the method of claim 70.

75. (Original) A monoclonal antibody produced by the method of claim 71.

76. (Original) A method of making a monoclonal antibody of interest comprising:

a) contacting a hybridoma cell, wherein greater than twenty monoclonal antibody molecules are expressed and bound to the cell surface with an antigen linked to a detectable label, wherein the antigen binds to the monoclonal antibody to yield a detectably labeled hybridoma cell;
b) isolating the detectably labeled hybridoma cell, thus identifying a hybridoma cell that produces the monoclonal antibody of interest;
c) making the monoclonal antibody of interest from the hybridoma cell.

77. (Original) A method of making a monoclonal antibody of interest comprising:

a) contacting a hybridoma cell, wherein greater than twenty monoclonal antibody molecules are expressed and bound to the cell surface with an antigen, wherein the antigen binds to the monoclonal antibody;
b) adding a detectable label to the antigen to yield a detectably labeled hybridoma cell;
c) isolating the detectably labeled hybridoma cell, thus identifying a hybridoma cell that produces the monoclonal antibody of interest; and
d) making the monoclonal antibody of interest from the hybridoma cell.

78. (Original) The method of claim 76, wherein the detectable label is a fluorescent label, and wherein the hybridoma cell is isolated via fluorescence activated cell sorting.

79. (Original) The method of claim 77, wherein the detectable label is a fluorescent label, and wherein the hybridoma cell is isolated via fluorescence activated cell sorting.

80. (Original) A monoclonal antibody produced by the method of claim 76.

81. (Original) A monoclonal antibody produced by the method of claim 77.

82. (Original) The present invention also provides a method of making a monoclonal antibody of interest comprising:

a) contacting a B cell comprising a vector, wherein the vector comprises a nucleic acid encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ with an antigen linked to a detectable label, wherein the antigen binds to the monoclonal antibody to yield a detectably labeled B cell;
b) isolating the detectably labeled B cell, thus identifying a B cell that produces the monoclonal antibody of interest; and
c) making the monoclonal antibody of interest.

83. (Original) The present invention also provides a method of making a monoclonal antibody of interest comprising:

a) contacting a B cell comprising a vector, wherein the vector comprises a nucleic acid encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ with an antigen;
b) adding a detectable label that binds to the antigen to yield a detectably labeled B cell;

c) isolating the detectably labeled B cell, thus identifying a B cell that produces the monoclonal antibody of interest; and

d) making the monoclonal antibody of interest.

84. (Original) The method of claim 82,wherein the detectable label is a fluorescent label, and wherein the hybridoma cell is isolated via fluorescence activated cell sorting.

85. (Original) The method of claim 83, wherein the detectable label is a fluorescent label, and wherein the hybridoma cell is isolated via fluorescence activated cell sorting.

86. (Original) A monoclonal antibody produced by the method of claim 82.

87. (Original) A monoclonal antibody produced by the method of claim 83.

88. (Original) A method of making a hybridoma cell that produces a monoclonal antibody that recognizes a selected antigen comprising:

a) immunizing a mouse with the antigen;

b) fusing a B cell from the immunized mouse with a myeloma cell that comprises at least one nucleic acid functionally encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ to produce a monoclonal antibody producing hybridoma cell, wherein the monoclonal antibody produced by the hybridoma cell is expressed and bound to the cell surface;

c) contacting the monoclonal antibody producing hybridoma cell with the antigen, wherein the antigen binds to the monoclonal antibody on the cell surface to produce a detectable hybridoma cell,

d) detecting the hybridoma cell and;

e) isolating the hybridoma cell, thus making a hybridoma cell that produces a monoclonal antibody that recognizes a specific antigen.

89. (Original) The method of claim 88, wherein the antigen is linked to a detectable label.

90. (Original) A method of making a hybridoma cell that produces a monoclonal antibody that recognizes a selected antigen comprising:

a) contacting the B cell of claim 43 with an antigen, wherein the antigen binds to the monoclonal antibody to yield a detectable B cell;
b) detecting the B cell;
c) isolating the B cell, thus identifying a B cell that produces the monoclonal antibody of interest and;
d) fusing the B cell that produces the monoclonal antibody of interest to a myeloma cell to produce a hybridoma cell that produces a monoclonal antibody that recognizes a selected antigen.

91. (Original) The method of claim 90, wherein the antigen is linked to a detectable label.

92. (Original) A transgenic animal comprising B cells comprising a vector, wherein the vector comprises a nucleic acid encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ.

93. (Original) The transgenic animal of claim 92, wherein the B cells comprise at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ.

94. (Original) The transgenic animal of claim 92, wherein the B cells comprise at least one mutated surface-expressed antibody receptor selected from the group consisting of Igα and Igβ.

95. (Original) The transgenic animal of claim 92, wherein the B cells comprise at least one chimeric surface-expressed antibody receptor selected from the group consisting of Igα and Igβ.

96. (Original) The transgenic animal of claim 92, wherein the mutated Igα receptor comprises one or more mutations selected from the group consisting of: Y176F, Y182F, Y193F, Y204F.

97. (Original) The transgenic animal of claim 92, wherein the mutated Igβ receptor comprises one or more mutations selected from the group consisting of: Y190F and Y206F.

98. (Original) A method of generating the transgenic animal of claim 92 comprising:

a) injecting a transgene comprising a nucleic acid encoding Igα functionally linked to an expression sequence and/or a transgene comprising a nucleic acid encoding Igβ functionally linked to an expression sequence into an embryo;
b) allowing the embryo to develop into an animal.

99. (Original) The method of claim 98 further comprising crossing the animal of claim 73 with a second animal to produce a third animal.

100. (Original) The method of claim 98, wherein the animal is a mouse.

101. (Original) The method of claim 98, wherein the animal is a rabbit.

102. (Original) The method of claim 98, wherein the animal is a rat.

103. (Original) The method of claim 98, wherein the animal is a guinea pig.

104. (Original) The method of claim 98, wherein the expression of the transgene is inducible.

105. (Original) The transgenic animal of claim 92,wherein the expression of the transgene is controlled by the cre-lox expression system.

106. (Original) The transgenic animal of claim 92, wherein the expression of the transgene is controlled by an inducible tetracycline promoter system.

107. (Original) A method of identifying a cell that produces a monoclonal antibody that recognizes a specific antigen comprising:

a) immunizing the animal of claim 92 with the antigen;

b) isolating the B cells from the animal of step a);

c) contacting the cells of step b) with the antigen wherein the antigen binds to the monoclonal antibody to yield a detectable B cell c) detecting the B cell;

d) isolating the detectable B cell, thus identifying a cell that produces a monoclonal antibody that recognizes a specific antigen.

108. (Original) The method of claim 107, wherein the detectable label is a fluorescent label, and wherein the hybridoma cell is isolated via fluorescence activated cell sorting.

109. (Original) The transgenic animal produced by the method of claim 98.

110. (Original) A B cell obtained from the animal of claim 92.

111. (Original) A hematopoietic stem cell comprising a vector, wherein the vector comprises a nucleic acid encoding at least one surface-expressed antibody receptor selected from the group consisting of Igα and Igβ.

112. (Original) A hybridoma cell comprising an extra copy of a nucleic acid encoding Igα and/or Igβ.

113. (Original) The hybridoma cell of claim 112, wherein the nucleic acid encodes Igα.

114. (Original) A population of hybridoma cells comprising a vector comprising a nucleic acid encoding Igα and/or Igβ that expresses monoclonal antibody bound to the cell surface, wherein when the monoclonal antibody is detected by fluorescence, the fluorescence intensity of the population of cells is at least two fold greater than the fluorescence intensity of a population of hybridoma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

115. (Original) The population of claim 114, wherein the fluorescence intensity is at least five fold greater.

116. (Original) The population of claim 114, wherein the fluorescence intensity is at least ten fold greater.

117. (Original) The population of claim 114, wherein the fluorescence intensity is at least twenty five fold greater.

118. (Original) The population of claim 114, wherein the fluorescence intensity is at least fifty fold greater.

119. (Original) The population of claim 114, wherein the fluorescence intensity is at least one hundred fold greater.

120. (Original) The population of claim 114, wherein the hybridoma cells comprise a vector comprising a nucleic acid encoding Igα.

121. (Original) The population of claim 114, wherein the population is between 25 and 250 cells.

122. (Original) A population of plasma cells comprising a vector comprising a nucleic acid encoding Igα and/or Igβ that expresses monoclonal antibody bound to the cell surface,

wherein when the monoclonal antibody is detected by fluorescence the fluorescence intensity of the population of cells is at least two fold greater than the fluorescence intensity of a population of plasma cells that does not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

123. (Original) The population of claim 122, wherein the fluorescence intensity is at least five fold greater.

124. (Original) The population of claim 122, wherein the fluorescence intensity is at least ten fold greater.

125. (Original) The population of claim 122, wherein the fluorescence intensity is at least twenty five fold greater.

126. (Original) The population of claim 122, wherein the fluorescence intensity is at least fifty fold greater.

127. (Original) The population of claim 122, wherein the fluorescence intensity is at least one hundred fold greater.

128. (Original) The population of claim 122, wherein the hybridoma cells comprise a vector comprising a nucleic acid encoding Igα.

129. (Original) The population of claim 122, wherein the population is between 25 and 250 cells.

130. (Original) A population of hybridoma cells comprising a vector comprising a nucleic acid encoding Igα and/or Igβ that expresses monoclonal antibody bound to the cell surface, wherein when the monoclonal antibody is detected by fluorescence, the fluorescence intensity of at least 10% of the cells is at least two fold greater than a the

fluorescence intensity of a population of hybridoma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

131. (Original) The population of claim 130, wherein the fluorescence intensity of at least 25% of the cells is at least two fold greater than a the fluorescence intensity of a population of hybridoma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

132. (Original) The population of claim 130, wherein the fluorescence intensity of at least 50% of the cells is at least two fold greater than a the fluorescence intensity of a population of hybridoma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

133. (Original) The population of claim 130, wherein the fluorescence intensity of at least 75% of the cells is at least two fold greater than a the fluorescence intensity of a population of hybridoma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

134. (Original) The population of claim 130, wherein the fluorescence intensity of at least 10% of the cells is at least three fold greater than a the fluorescence intensity of a population of hybridoma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

135. (Original) The population of claim 130, wherein the fluorescence intensity of at least 10% of the cells is at least five fold greater than a the fluorescence intensity of a population of hybridoma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

136. (Original) The population of claim 130, wherein the fluorescence intensity of at least 10% of the cells is at least ten fold greater than a the fluorescence intensity of a

population of hybridoma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

137. (Original) The population of claim 130, wherein the hybridoma cells comprise a vector comprising a nucleic acid encoding Igα.

138. (Original) The population of claim 130, wherein the population is 25 to 250 cells.

139. (Original) A population of plasma cells comprising a vector comprising a nucleic acid encoding Igα and/or Igβ that expresses monoclonal antibody bound to the cell surface, wherein when the monoclonal antibody is detected by fluorescence the fluorescence intensity of at least 10% of the cells is at least two fold greater than the fluorescence intensity of a population of plasma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

140. Original) The population of claim 139, wherein the fluorescence intensity of at least 25% of the cells is at least two fold greater than a the fluorescence intensity of a population of plasma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

141. (Original) The population of claim 139, wherein the fluorescence intensity of at least 50% of the cells is at least two fold greater than a the fluorescence intensity of a population of plasma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

142. (Original) The population of claim 139, wherein the fluorescence intensity of at least 75% of the cells is at least two fold greater than a the fluorescence intensity of a population of plasma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

143. (Original) The population of claim 139, wherein the fluorescence intensity of at least 10% of the cells is at least three fold greater than a the fluorescence intensity of a population of plasma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

144. (Original) The population of claim 139, wherein the fluorescence intensity of at least 10% of the cells is at least five fold greater than a the fluorescence intensity of a population of plasma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

145. (Original) The population of claim 139, wherein the fluorescence intensity of at least 10% of the cells is at least ten fold greater than a the fluorescence intensity of a population of plasma cells that do not comprise a vector comprising a nucleic acid encoding Igα and/or Igβ.

146. (Original) The population of claim 139, wherein the plasma cells comprise a vector comprising a nucleic acid encoding Igα.

147. (Original) The population of claim 139, wherein the population is 25 to 250 cells.